

AMENDMENTS TO THE CLAIMS

LISTING OF CLAIMS IN THE CASE

The following listing of claims replaces all previous listing of claims:

1. (Currently Amended) A network device comprising:
a processor, wherein said processor is integrated within said network device;
an input interface for receiving a plurality of packets coupled to said processor, said input interface comprising at least one input port wherein at least one said input port is configured to sample at least one input packet and transmit a sampled input packet to said processor, wherein at least one of said input port comprises a countdown register, and wherein said input port is configured to sample a packet according to said countdown register;
an output interface for transmitting a plurality of packets coupled to said processor, said output interface comprising at least one output port wherein at least one said output port is configured to sample at least one output packet and transmit a sampled output packet to said processor, wherein said input interface and said output interface feed into said processor, wherein at least one of said output port comprises a countdown register, and wherein said output port is configured to sample a packet according to said countdown register; and
a switching fabric coupled to said input interface and said output interface, said switching fabric configured to transmit a packet between said input interface and said output interface.

2. (Canceled)

3. (Canceled)

4. (Original) A network device as recited in Claim 1 wherein said processor

transmits said sampled input packet and said sampled output packet to a central control station over a network.

5. (Original) A network device as recited in Claim 4 wherein said central control station comprises a statistical monitoring station.

6. (Original) A network device as recited in Claim 1 wherein said sampled input packet comprises an identification of said input port that sampled said sampled input packet.

7. (Original) A network device as recited in Claim 1 wherein said sampled output packet comprises an identification of said output port that sampled said sampled output packet.

8. (Currently Amended) A network device as recited in Claim 1 2 wherein said countdown register is a random number countdown register.

9. (Currently Amended) A network device as recited in Claim 1 3 wherein said countdown register is a random number countdown register.

10. (Currently Amended) A method of sampling a packet comprising:
receiving a plurality of packets at an input network circuit of a network device, said input network circuit comprising at least one input port;
sampling at least one input packet at said input port, wherein said sampling comprises using a countdown circuit;

transmitting at least one sampled input packet to a processor of said network device, wherein said processor is integrated within said network device;

transmitting at least one packet from said input network circuit to an output network circuit of said network device over a switching fabric of said network device, said output network circuit comprising at least one output port, wherein said input

network circuit and said output network circuit feed into said processor;

sampling at least one output packet at said output port, wherein said sampling comprises using a countdown circuit; and

transmitting at least one sampled output packet to said processor.

11. (Canceled)

12. (Currently Amended) A method as recited in Claim 10 ~~11~~ wherein said countdown circuit is a random number countdown circuit.

13. (Canceled)

14. (Canceled)

15. (Original) A method as recited in Claim 10 further comprising said processor transmitting said sampled input packet to a statistical monitoring station over a network.

16. (Original) A method as recited in Claim 10 further comprising said processor transmitting said sampled output packet to a statistical monitoring station over a network.

17. (Previously Presented) A method as recited in Claim 10 wherein said sampled input packet comprises information regarding said input port performing said sampling at least one input packet at said input port.

18. (Previously Presented) A method as recited in Claim 10 wherein said sampled output packet comprises information regarding said output port performing said sampling at least one output packet at said output port.

19. (Currently Amended) A network device for sampling a packet comprising:
processing means, wherein said processing means is integrated into said network device;

means for receiving a plurality of packets over a network, said means for receiving a plurality of packets comprising an input means for sampling at least one packet and transmitting a sampled incoming packet to said processing means, said means for receiving a plurality of packets coupled to said processing means;

means for transmitting a plurality of packets over said network, said means for transmitting a plurality of packets comprising an output means for sampling at least one packet and transmitting a sampled outgoing packet to said processing means, said means for transmitting a plurality of packets coupled to said processing means, wherein said means for receiving a plurality of packets of said network and said means for transmitting a plurality of packets over said network feed into said processing means, wherein at least one of said output means comprises a countdown means, wherein said output means is configured to sample a packet of said plurality of packets according to said countdown means, wherein at least one of said input means comprises a countdown means, and wherein said input means is configured to sample a packet of said plurality of packets according to said countdown means; and

switching means coupled to said means for receiving a plurality of packets and said means for transmitting a plurality of packets, said switching means for transmitting a packet between said means for receiving a plurality of packets and said means for transmitting a plurality of packets.

20. (Canceled)

21. (Canceled)

22. (Previously Presented) A network device as recited in Claim 19 wherein said processing means transmits said sampled incoming packet and said sampled

outgoing packet to a central control means over a network.

23. (Currently Amended) A network device comprising:

- a switching fabric;
- an input interface coupled to said switching fabric, said input interface comprising at least one input port;
- an output interface coupled to said switching fabric, said output interface comprising at least one output port;
- a computer-readable memory coupled to said input interface and said output interface; and
- a microcontroller coupled to said input interface and said output interface, wherein said microcontroller is integrated into said network device, wherein said input interface and said output interface feed into said microcontroller, said microcontroller for executing a method of sampling a packet, said method comprising:
 - sampling at least one incoming packet at received at said input port, wherein said sampling at said input port includes using a countdown register;
 - transmitting said sampled incoming packet to said microcontroller;
 - transmitting at least one packet from said input interface to said output interface over said switching fabric;
 - sampling at least one outgoing packet at said output port, wherein said sampling at said output port includes using a countdown register; and
 - transmitting said sampled outgoing packet to said microcontroller.

24. (Original) A network device as recited in Claim 23 wherein said method further comprises said microcontroller transmitting said sampled incoming packet to a statistical monitoring station over a network.

25. (Original) A network device as recited in Claim 23 wherein said method

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further comprises said microcontroller transmitting said sampled outgoing packet to a statistical monitoring station over a network.